

Orleans Land Bridge Preservation and Restoration- Alligator Bend

(Pontchartrain Coastal Lines of Defense Program)

Lake Pontchartrain Basin Foundation - Coastal Sustainability Program

The Orleans land bridge is one of ten priority project areas within the Pontchartrain Coastal Lines of Defense Program for the Pontchartrain Basin (Figure 1). All projects within this program provide significant habitat restoration and flood protection. The Orleans Land Bridge is the natural landscape barrier between Lakes Pontchartrain and Borgne and therefore is a primary control on the hydrology of the estuarine gradient and of storm surges for the surrounding region. The land bridge also serves as a major industrial, transportation corridor. The Alligator Bend project would help protect oil and gas infrastructure in Lake St. Catherine. This significance has been noted by many local residents and parish, state and federal officials. The land bridge has shoreline reaches of chronic high rates of shoreline retreat. Hurricane Katrina also caused significance losses on portions of the landbridge.

The Pontchartrain Coastal Lines of Defense Program represents an integrated set of projects which is based on the highly vetted Comprehensive Habitat Management Plan for the Pontchartrain Basin (2006). The CHMP was developed over two years by a team of qualified engineers, biologists and physical scientists including representation from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, University of New Orleans, Southeastern University, LA Department of Nature Resources, Pontchartrain Institute for Environmental Sciences and LSU AgCenter. The plan was peer-reviewed by representatives from National Marine Fisheries Service, Natural Resource Conservation Service, LSU, U.S. Geological Survey, LA Geological Survey, The Nature Conservancy, and EPA Gulf of Mexico Program Office and the Coalition to Restore Coastal Louisiana.

The final CHMP is a federally approved plan by the EPA Region VI office. The Coalition to Restore Coastal Louisiana and the Louisiana Wildlife Federation have passed resolutions endorsing both the Comprehensive Habitat Management Plan and the Pontchartrain Coastal Lines of Defense Program. Since its release, the Pontchartrain Coastal Lines of Defense Program has been presented to numerous parish, state and federal officials. It is also publicly accessible on the web.



Figure 1: Location of the Orleans Land Bridge preservation and restoration project. This project is one ten projects in the Pontchartrain Coastal Lines of Defense Program. Project includes shoreline protection and marsh creation. planting.

Lake Pontchartrain Basin Foundation, 2006, Comprehensive Habitat Management Plan for the Pontchartrain Basin, http://www.saveourlake.org/wetlands.htm on April 2006

Lake Pontchartrain Basin Foundation, 2006, Pontchartrain Coastal Lines of Defense Program, http://www.saveurlake.org/wetlands.htm on April 2006

Lopez, J. A., 2006, The Multiple Lines of Defense Strategy to Sustain Coastal Louisiana, white paper, Lake Pontchartrain Basin Foundation

Fact Sheet -Orleans Land Bridge Preservation and Restoration -Alligator Bend

Project Name: Orleans Land Bridge Preservation and Restoration-Alligator Bend

Coastal Planning

Included in Coast 2050

Comprehensive Habitat Management Plan – endorsed by CRCL and the LA Wildlife Federation CWPPRA nominated projects on the land bridge by U.S.CE, & NRCS for PPL 15 & 16 Included in Orleans Parish Mayor's Office of Environmental Affairs Wynecta Fisher, Deputy Director – 3 of 5 "Tier 1 projects" are on the Orleans Land Bridge

Project Location

Region 1, Pontchartrain Basin, Orleans Parish (Figure 2)

Problem

The landfall of hurricane Katrina in southeast Louisiana destroyed thousands of acres of marsh and other coastal habitats in the Lake Pontchartrain basin. Along the shorelines of Lake Borgne the storm created breaches between the lake and interior marshes and in some cases removed large expanses of wetlands. Loss of wetlands in the Alligator Bend area (see attached map) has created more than 1,000 acres of open water in a complex that formerly supported relatively stable brackish marshes. Post-storm aerial photographs show the most significant losses occurred along the flanks of Bayou Platte. The current landscape configuration has left a large area of open water between eroding shorelines on Lake Borgne and along the GIWW. Continued shoreline erosion and future storms could create a direct path of open water connecting the GIWW and Lake Borgne and threaten the integrity of this important landbridge.

Proposed Project Feature

- Dedicated dredging to restore wetlands on the East Orleans Land Bridge that were destroyed during the passage of hurricane Katrina.
- · Planting wetlands vegetation.

Goals

- Restore critical wetlands destroyed by hurricane Katrina.
- Prevent breaching of degraded marshes between the GIWW and Lake Borgne.

Preliminary Project Benefits

The project will benefit up to 1,000 acres intertidal marsh and open water.

Identification of Potential Issues

Preliminary Construction Costs

The estimated construction cost to rebuild marshes in the area is \$10 million - \$15 million.

Preparers of Fact Sheet

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Figure 2: Orleans Land bridge and the Alligator Bend Marsh creation and shoreline protection project. Project is currently being evaluated under CWPPRA for PPL 16. The project would restore marsh loss by Hurricane Katrina and help maintain the integrity of the land bridge of paramount significance to the region.